

REMARKS

This is in response to the outstanding Office Action mailed May 18, 2009. Claims 12-18 and 23 are pending. Applicants have previously withdrawn claims 19-22 without prejudice or disclaimer. Claim 12 has been amended. Claim 23 has been cancelled. New claims 24 and 25 have been added. Applicants respectfully request withdrawal of the outstanding rejections and allowance of the claims.

Response to Amendment of Specification

In the outstanding Office Action, the Examiner indicated the amendment filed 3/30/2009 is objected to under 35 U.S.C. §132(a) as introducing new matter. Specifically, the Examiner indicated material added to pages 6 and 8 of the Specification concerning "fluid introduced in a direction toward the exit of the nozzle" must be cancelled. Applicants have revised the amendments to the Specification as required by the Examiner.

Response to Rejection of Claims 12-18 and 23 Under U.S.C. §112, First Paragraph

1. In the outstanding Office Action, the Examiner rejected claims 12-18 and 23 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the Specification. Specifically, the Examiner could not find support for the claim limitation that the fluid is introduced in a direction toward the exit of the nozzle. Independent claim 12 has been amended thereby obviating this rejection. Dependent claims 13-18 depend from amended claim 12. Claim 23 has been cancelled.

2. In the outstanding Office Action, the Examiner rejected claim 23 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the Specification. Specifically, the Examiner could not find support for the limitation that the only tension on the roving unwinding from the roving packages is caused by the at least one fluid. Claim 23 has been cancelled.

Rejection of Claims 12, 14-17 and 23 Under 35 U.S.C. §103(a)

In the outstanding Office Action, claims 12, 14-17 and 23 were rejected 35 U.S.C. 103(a) as being unpatentable over Droux (WO 02/084005) in view of Picone (U.S. No. 4,345,927).

Independent claim 12 has been amended to provide a method of preparing a continuous strand mat. The method includes paying-out a roving from at least one roving package supported on a spindle via the outside, directing the roving in a downward vertical direction toward a nozzle, wherein the weight of the roving when directed in a downward vertical direction induces a tension on the roving, passing the roving through the nozzle, wherein the roving passes through an entry and then an exit of the nozzle, the nozzle also provided with a transverse injection of at least one fluid, the at least one fluid configured to divide the roving into strands, wherein the fluid is further configured to induce a downward tension on the strands and throwing the strands forming the roving in an oscillatory movement onto the conveyor belt, wherein the directing of the roving is carried out in the absence of tension inducing apparatus or process steps other than the tension induced in the roving caused by the combination of the at least one fluid and the weight of the roving when directed in a downward vertical direction.

Support for amended claim 12 can be found in the Specification on page 6 at lines 5-9 and lines 30-33 and on page 8 at lines 19-22 and lines 36-39.

In the outstanding Office Action, the Examiner asserts the Droux reference discloses the method and all of the limitations of Applicants' independent claim 12 with the exception of the fluid directed toward the exit. However, the Droux reference does not disclose the method claimed in Applicants' amended independent claim 12. Specifically, the Droux reference fails to disclose that the directing of the roving is carried out in the absence of tension inducing apparatus or process steps other than the tension induced in the roving caused by the combination of the at least one fluid and the weight of the roving when directed in a downward vertical direction. Rather, the Droux reference discloses a pulling means (7) positioned downstream from the roving

package (1). The pulling means (7) includes pulleys (71, 72 and 73) driven by a motor (74) and configured to pull the fiber bundle (column 3, line 30 and column 4, lines 39-40). As a result of pulling the fiber bundle, a tension is induced in the fiber bundle by the pulling means (7). There is simply no disclosure in the Droux reference that the directing of the roving is carried out in the absence of tension inducing apparatus or process steps other than the tension induced in the roving caused by the combination of the at least one fluid and the weight of the roving when directed in a downward vertical direction as claimed in Applicants' amended independent claim 12.

Even a combination of the Droux and Picone references, as suggested by the Examiner, does not encompass the combination of limitations of the method as claimed in Applicants' amended independent claim 12. The combination of the Droux and Picone references does not show that the directing of the roving is carried out in the absence of tension inducing apparatus or process steps other than the tension induced in the roving caused by the combination of the at least one fluid and the weight of the roving when directed in a downward vertical direction. Rather, a combination of the Droux and Picone references provides a method of introducing tension in the roving by pulling the roving from the roving package as provided by the Droux reference and a fluid introducing nozzle as provided by the Picone reference.

It is well established that all claim limitations must be considered in judging the patentability of a claim against the prior art. As set forth in the MPEP, at least at §2143.03, in order to establish prima facie obviousness of a claimed invention, all of the claimed limitations must be considered against the prior art, citing In Re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). In this regard, Applicants' amended independent claim 12 is non-obvious under 35 U.S.C. §103(a) in view of the Droux and Picone references. Therefore the rejection of amended independent claim 12 is not applicable and the claim is patentable as presented.

Dependent claims 13-18 depend on amended independent claim 12 and for at least this reason, are also patentable.

Rejection of Claims 13 and 18 Under 35 U.S.C. §103(a)

In the outstanding Office Action, claims 13 and 18 were rejected 35 U.S.C. 103(a) as being unpatentable over Droux (WO 02/084005) in view of Picone (U.S. No. 4,345,927) and further in view of Miller (U.S. No. 6,491,773).

Dependent claims 13-18 depend on amended independent claim 12 and for at least the same reasons as discussion above, are also patentable.

New Claims

New independent claim 24 has been added to further define the invention. New independent claim 24 provides a method of preparing a continuous strand mat, the strands coming from at least one roving thrown onto a conveyor belt, the method consisting essentially of paying-out a roving from at least one roving package, the roving having a weight, directing the roving in a downward vertical direction through a nozzle, the nozzle being provided with a transverse injection of at least one fluid configured to divide the roving into strands and throwing the strands forming the roving in an oscillatory movement onto the conveyor belt, wherein a tension is induced on the roving from the weight of the roving when directed in a downward vertical direction and from the at least one fluid, the tension configured to allow the continuous strand mats to be manufactured with decreased roving breakage, and wherein the tension induced from the weight of the roving and the tension induced from the fluid are the only mechanisms applying tension to the roving. Support for new claim 24 can be found in the Specification on page 6 at lines 5-9 and lines 30-33 and on page 8 at lines 19-22 and lines 36-39.

New dependent claim 25 has been added to further define the invention. New dependent claim 25 provides the method as claimed in claim 24 in which the at least one fluid has an adjustable pressure, wherein the adjustable pressure is adjusted to induce a desired tension on the roving. Support for new claim 25 can be found in the Specification on page 9 at lines 15-17.

Conclusion

In view of the above amendments and remarks, Applicants have shown that the claims are in proper form for allowance, and the invention, as defined in the claims, is not taught or disclosed by the applied references. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejections of record, and allowance of all claims.

Respectfully submitted,

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